



NOAA Research in Minnesota



MN-1 through 8 (Based in Duluth - serves the entire state)

National Sea Grant College Program Minnesota Sea Grant College Program

The Minnesota Sea Grant College Program, part of the National Sea Grant College Program, is a statewide program that works with people and communities to help maintain and enhance the environment and economies along Lake Superior and Minnesota's inland waters by identifying needs, funding research, and translating results. Current research priorities include aquatic community restoration, aquatic resource management, fundamental dynamics of Lake Superior, pollutant processes and effects, minimizing terrestrial/aquatic human impacts, and integrating science into policy for coastal resource management. The public, industry, and policy makers are kept informed on issues related to aquaculture, exotic species, fisheries, aquatic education, contaminants, and fisheries through a series of publications including Minnesota Sea Grant's newsletter the "Seiche." In FY 2001, Minnesota Sea Grant projects received funding of approximately \$1.3 million from the National Sea Grant College Program. For more information please visit <http://www.seagrants.umn.edu>

MN-1 through 8 (Statewide)

Climate and Global Change Program

NOAA is responsible for providing climate information to the nation in order to prepare and protect climate sensitive sectors of society and the economy. To carry out this mission, NOAA's Climate and Global Change Program conducts focused scientific research to understand and predict variations of climate. The program is comprised of a number of research elements, each focusing on a specific aspect of climate variability. Taken together, this research contributes to improved predictions and assessments of the effects of climate variability and change on different environments over a continuum of time scales from season to season, year to year, and over the course of a decade and beyond. This research is accomplished through the strong support of the academic and private sectors, as well as NOAA and other federal laboratories. In FY 2001, NOAA's Climate and Global Change Program provided approximately \$20,000 in support of climate research in the State of Minnesota. For more information please visit <http://www.ogp.noaa.gov>

MN- 2, 4, and 8 (Wood Lake, St. Paul, and Pine River)

Forecast Systems Laboratory GPS Meteorological Observing System

NOAA's Forecast Systems Laboratory (FSL) operates a rapidly expanding network of GPS Meteorological (GPS-Met) Observing Systems to monitor the total quantity of precipitable water

vapor in the atmosphere. Currently, there are 93 systems over the contiguous 48 states and Alaska, and plans are being made to extend these observations to Hawaii, Puerto Rico, the Caribbean Islands, and Central America. Water vapor is an important but under-observed component of the atmosphere that plays a major role in severe weather events and the global climate system. GPS-Met systems provide accurate water vapor measurements under all weather conditions, including thick cloud cover and precipitation, and do so at very low cost. The major reason why this system is so economical is that the network is being developed by FSL in cooperation with federal, state and local government agencies, universities, and the private sector. The GPS stations provide high-accuracy surveying and navigation services for National defense, automated agriculture, safe land and marine transportation, government infrastructure management, and 911 emergency response services. Fortuitously, these systems can also be used for meteorology with the addition of surface weather sensors. GPS-Met systems located in Minnesota include one site operated by NOAA near Wood Lake, one operated by the U.S. Army Corps of Engineers near St. Paul, and one operated by the U.S. Department of Transportation near Pine River. For more information please visit <http://www.gpsmet.noaa.gov/jsp/index.jsp>

ME-7 and 8 (Lake Superior)

National Undersea Research Program

National Undersea Research Center for the Northeastern United States and Great Lakes

The National Undersea Research Center for the Northeastern United States and Great Lakes is located at the University of Connecticut, Avery Point in Groton, Connecticut. It is one of six regional centers supported by the National Undersea Research Program (NURP). The Center supports and conducts undersea research in the waters off the northeast coast of the United States and the Great Lakes. The center provides science and operational support (occupied submersibles, remotely operated vehicles and mixed gas diving technologies) and funding for reviewed projects within this region. The Center supports research on the physical, chemical, and biological factors controlling the cycling and fates of organic contaminants and heavy metals (trace metals) at the sediment/water interface and their ultimate impacts on biological productivity. Also receiving special attention are the habitat characteristics controlling the recruitment and population dynamics of recreational and commercial species of fish, including "pest" species. The FY 2001 funding for the Center totaled \$1.36 million. For more information please visit <http://www.nurc.uconn.edu>

ME-7 and 8 (Lake Superior)

Great Lakes Environmental Research Laboratory

Great Lakes Research

The Great Lakes Environmental Research Laboratory (GLERL) carries out research and provides scientific products, expertise, and services required for effective management and protection of Great Lakes and coastal ecosystems. As part of the mission of NOAA and the U.S. Department of Commerce, GLERL science provides for protection of life and property, economic well-being, and sustained ecosystem health. With a wide array of scientific disciplines on staff, and an ecosystem-level focus, GLERL contributes unique capabilities in support of intelligent and cost-effective Great Lakes and coastal resource management. GLERL is pursuing focused research in areas including

aquatic contaminants and biogeochemistry; invasive species, ecosystem dynamics and long-term monitoring. A number of GLERL projects have a basin-wide scope. These include: CoastWatch, Impacts of Climate Change, Water Resources Research, and Physical Processes including wind-driven waves, currents, seiches, storm surges, sediment transport and deposition, and lake bathymetry. In a new and unique effort started in February 2001, GLERL now has a Great Lakes Sea Grant Extension Agent onsite to support and promote increased communication and cooperation among GLERL and the seven Great Lakes Sea Grant Programs in the region, including the Minnesota Sea Grant program. By making GLERL scientific products, services, and expertise more widely available to the extensive Great Lakes Sea Grant Network, the agent can rely on the Network's vast outreach, communications, and education infrastructure to furnish constituents with a wider information base. For more information please visit <http://www.glerl.noaa.gov>

For further information about these and other NOAA programs, please contact NOAA's Office of Legislative Affairs at (202) 482-4981.

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